

FIG. 1

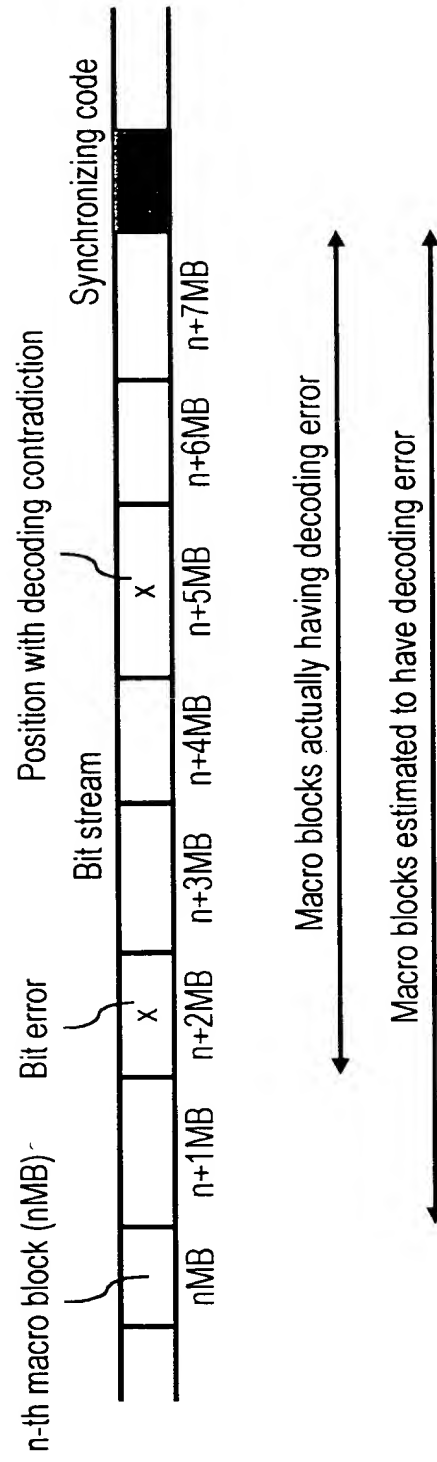
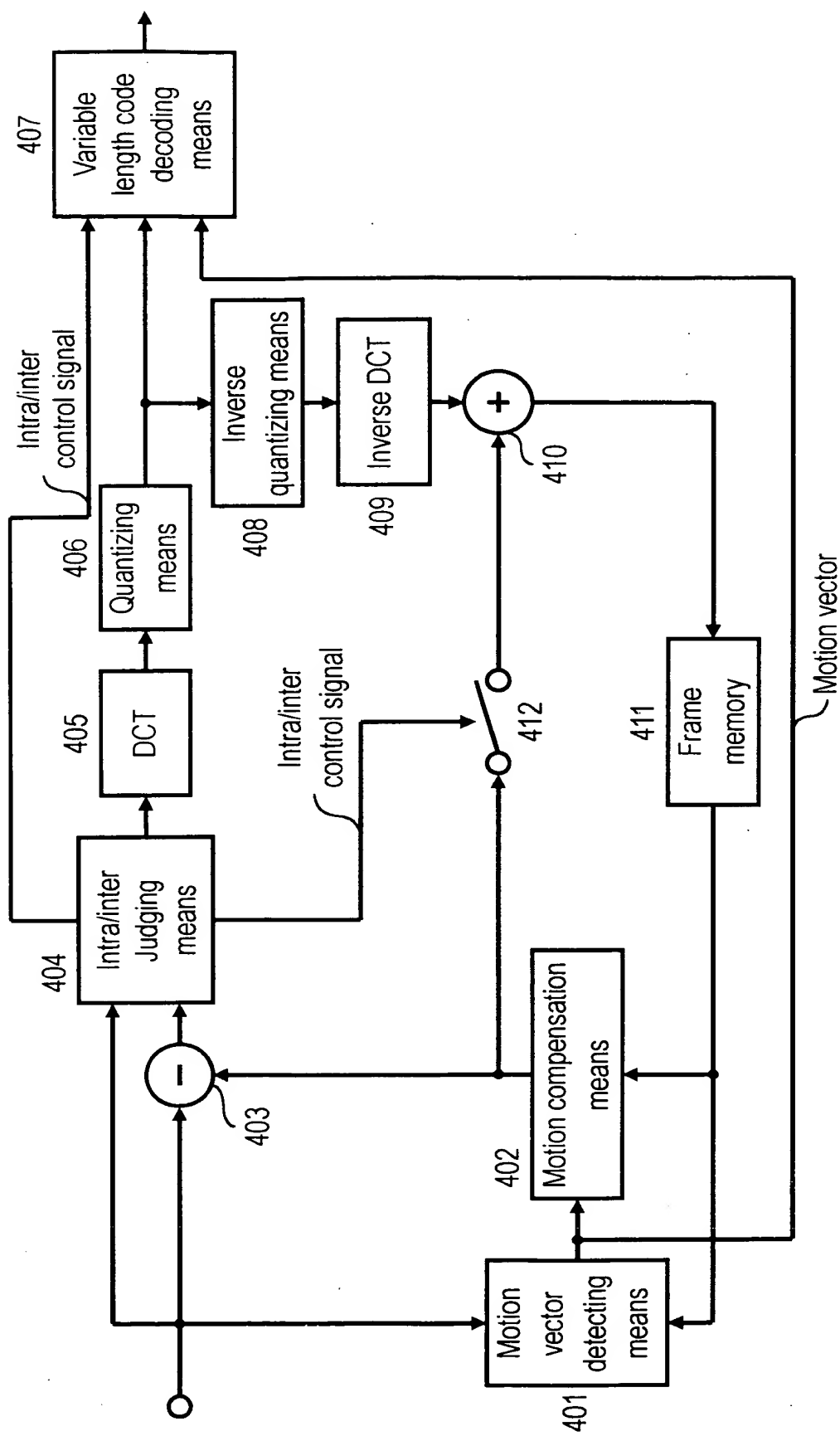


FIG. 2

The diagram illustrates a video encoding system with two parallel processing paths, A and B, for motion-compensated video encoding. The system includes the following components and signal flows:

- Inputs:** Two input signals, 313 and 301, are provided to the system.
- Motion Vector Detection:**
  - Input 313 is processed by **Motion vector detecting means B** (314).
  - Input 301 is processed by **Motion vector detecting means A** (301).
  - These units output **Motion vector A** and **Motion vector B**.
- Intra/inter Judging:**
  - Both input signals (313 and 301) are fed into **Intra/inter judging means** (304).
  - This unit outputs an **Intra/inter control signal** to the **Quantizing means** (306) and **Variable length code decoding means** (307).
- Path A (Motion Vector A):**
  - The input signal 301 is processed by **DCT** (305) and then **Quantizing means** (306).
  - The output of 306 is fed into **Motion compensation means A** (302).
  - Motion compensation means A** also receives **Motion vector A** and outputs **Predicted image A** (312).
  - Predicted image A** is combined with the output of 306 at a summing junction (+) to produce **Predicted image combining means** (315).
  - Predicted image combining means** outputs to **Frame memory A** (311).
  - Frame memory A** outputs to **Motion compensation means B** (314).
- Path B (Motion Vector B):**
  - The input signal 313 is processed by **DCT** (305) and then **Quantizing means** (306).
  - The output of 306 is fed into **Motion compensation means B** (314).
  - Motion compensation means B** also receives **Motion vector B** and outputs **Predicted image B** (317).
  - Predicted image B** is combined with the output of 306 at a summing junction (+) to produce **Predicted image combining means** (315).
  - Predicted image combining means** outputs to **Frame memory B** (316).
  - Frame memory B** outputs to **Motion compensation means A** (302).
- Final Output:**
  - The outputs of **Predicted image combining means** (315) for both paths are fed into a subtraction unit (-) (303).
  - The output of 303 is fed into **Variable length code decoding means** (307).
  - Variable length code decoding means** also receives the **Intra/inter control signal** and outputs the final encoded signal.

FIG. 3



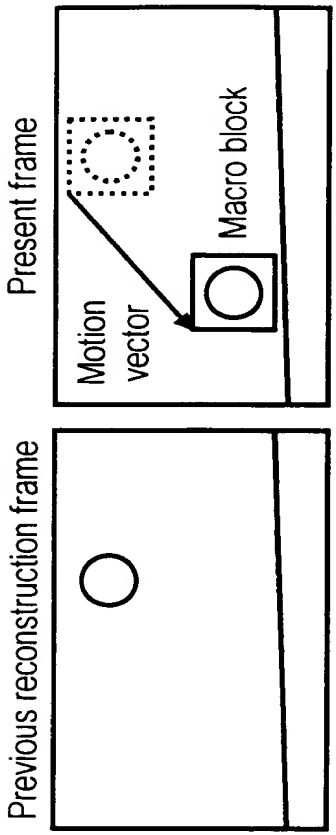


FIG. 5

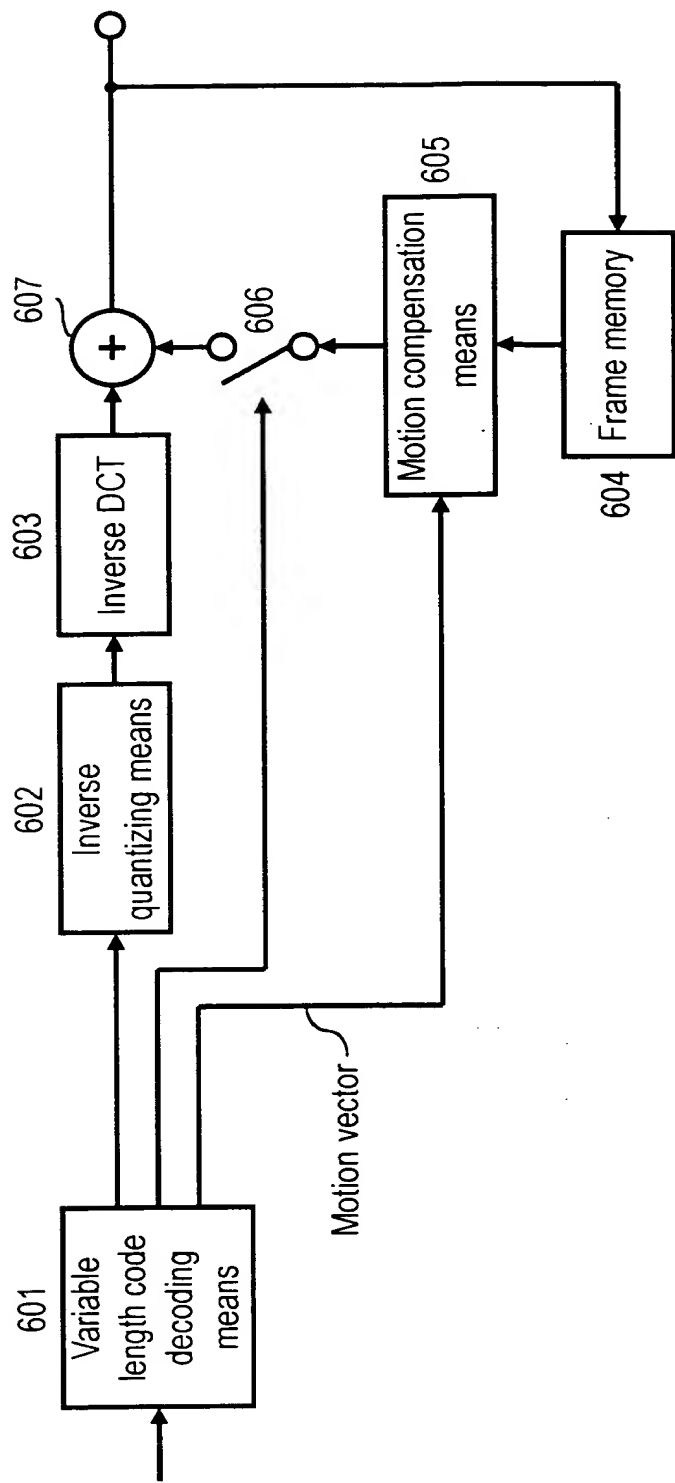


FIG. 6